AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions and listings of claims in the application:

1-20. (Canceled)

21. (Currently Amended) A method of treatment of liver dysfunction in a subject in need thereof comprising administering a genetically engineered autologous hepatocyte precursor cell, wherein [a] said hepatocyte precursor cell is obtained by expanding isolated immature cells obtained from said subject to enrich for hepatocyte precursor cells [removed from said subject], is genetically engineered *ex vivo* to be capable of treating said liver dysfunction, and is administered to the subject.

22. (Canceled).

23. (Previously Amended) The method of treatment of Claim 43 wherein the administering comprises injecting, transplanting, or grafting.

24. (Withdrawn) The method of treatment of Claim 23 wherein the injecting, transplanting, or grafting is an autologous injecting, transplanting, or grafting.

25. (Previously Amended) The method of treatment of Claim 43 wherein the subject further comprises a liver or a spleen and the administering comprises injecting, transplanting, or grafting the genetically engineered hepatocyte precursor cell, progeny thereof, or both into the liver or the spleen of the subject.

26. (Withdrawn) The method of treatment of claim 22 wherein the genetically engineered hepatocyte precursor is obtained by genetic modification of an isolated hepatocyte precursor.

27. (Previously Amended) The method of treatment of Claim 43 wherein the genetic modification comprises transducing a hepatocyte precursor cell with a vector comprising a genetic material or a selectable marker.

28. (Withdrawn) The method of treatment of claim 26 wherein the isolated hepatocyte precursor is capable of differentiating into a hepatocyte.

29. (Previously Amended) The method of Claim 43 wherein the genetically engineered hepatocyte precursor cell expresses at least one gene of interest as a result of the genetic engineering.

30. (Previously Presented) The method of Claim 29 wherein the gene of interest comprises a normal liver gene, a gene not expressed in mature normal liver cells, a gene with increased level of expression, or a combination thereof.

31. (Previously Presented) The method of Claim 29 wherein the gene of interest is incorporated into the genomic DNA of the subject.

32. (Previously Presented) The method of Claim 29 wherein the gene of interest is incorporated into the subject extrachromosomally.

33. (Previously Presented) The method of Claim 29 wherein the gene of interest comprises deoxyribonucleic acid or ribonucleic acid.

34. (Previously Presented) The method of treatment of Claim 29 wherein the gene of interest can be used to treat a viral hepatitis, correct a low density lipoprotein receptor, correct a deficiency of ornithine transcarbamylase, treat hemophilia, treat an alpha-1 anti-trypsin deficiency, treat phenylketonuria, or treat another defect in a metabolic pathway.

35. (Previously Presented) The method of treatment of Claim 29 wherein the gene of interest codes for a protein or polypeptide.

36. (Previously Presented) The method of treatment of Claim 35 wherein the protein or polypeptide is useful in prevention or therapy of an acquired or an inherited defect in liver function.

37. (Withdrawn) The method of treatment of claim 21 wherein the genetically engineered hepatocyte precursor is obtained by *ex vivo* genetic modification of a hepatocyte precursor.

38. (Withdrawn) The method of treatment of claim 21 wherein the genetically modified hepatocyte precursor is obtained by *in vivo* genetic modification of the hepatocyte precursors.

39. (Previously Amended) The method of treatment of Claim 43 wherein the subject is human.

40. (Currently Amended) A drug delivery system for delivering an expressed therapeutic polypeptide drug or protein drug to a subject having a liver dysfunction comprising genetically engineered hepatocyte precursor cells, wherein said hepatocyte precursor cells [is] are obtained by expanding isolated immature cells obtained from said subject to enrich for hepatocyte precursor cells, genetically engineering said hepatocyte precursor to express a therapeutic polypeptide drug or protein drug, wherein the genetically engineered hepatocyte precursor cells express, as a result of said genetic engineering, said therapeutic polypeptide drug or protein drug in an amount effective to treat said liver dysfunction.

41. (Currently Amended) A method of treatment of liver dysfunction in a human subject in need thereof comprising administering a [histocompatible normal] hepatocyte precursor cell, progeny thereof, or both to the human subject and treating liver dysfunction, wherein the [normal] hepatocyte precursor cell has been removed previously from a histocompatible donor and is capable of treating the liver dysfunction in said human subject.

42. (Previously Presented) The method of Claim 41 wherein said hepatocyte precursor cell, after having been removed previously from a histocompatible donor, is further genetically engineered *ex vivo* to be capable of treating said liver dysfunction in said human subject.

43. (Previously Presented) The method of Claim 21 further comprising administering to the subject progeny of said genetically engineered autologous hepatocyte precursor cell.